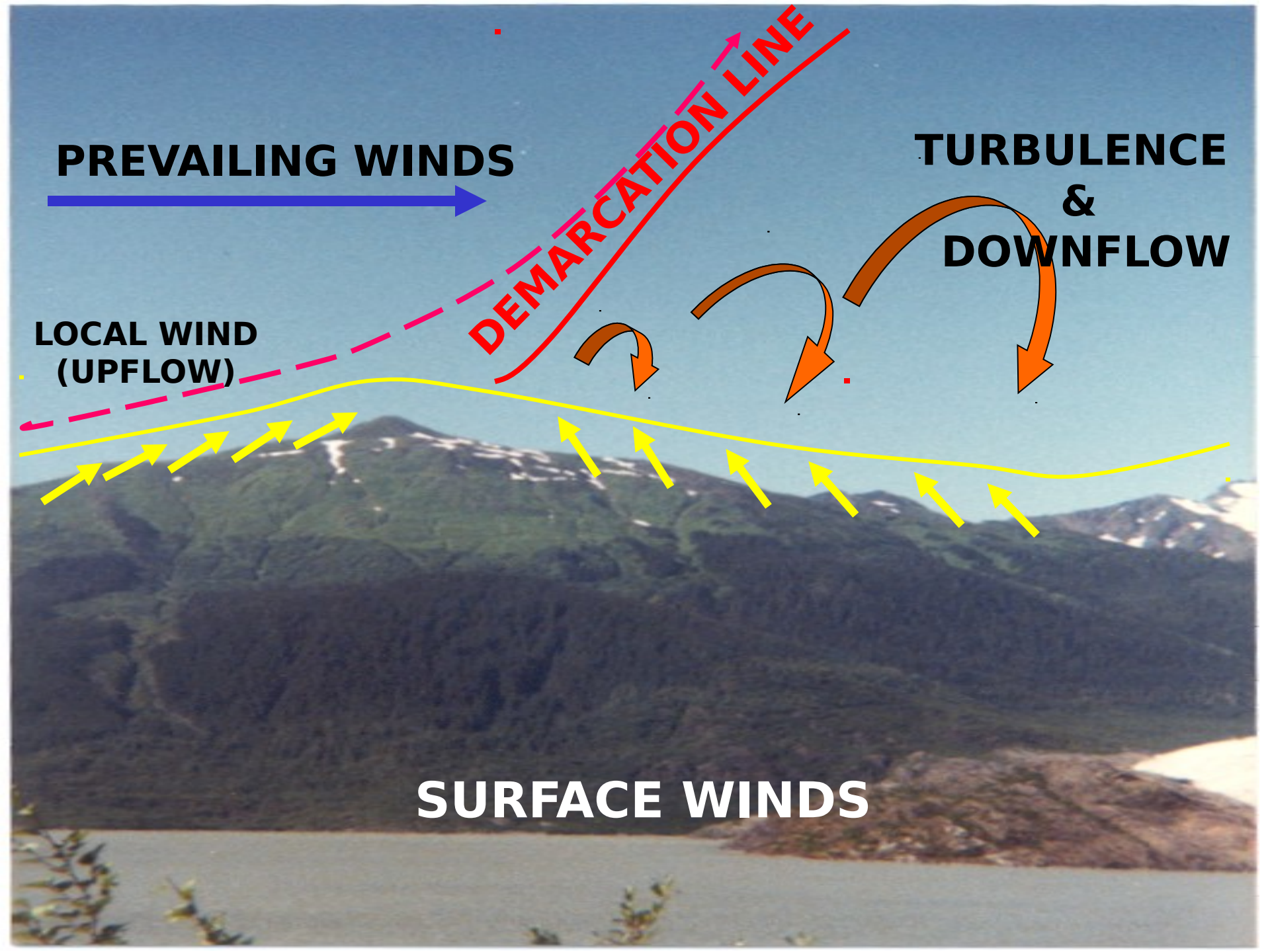
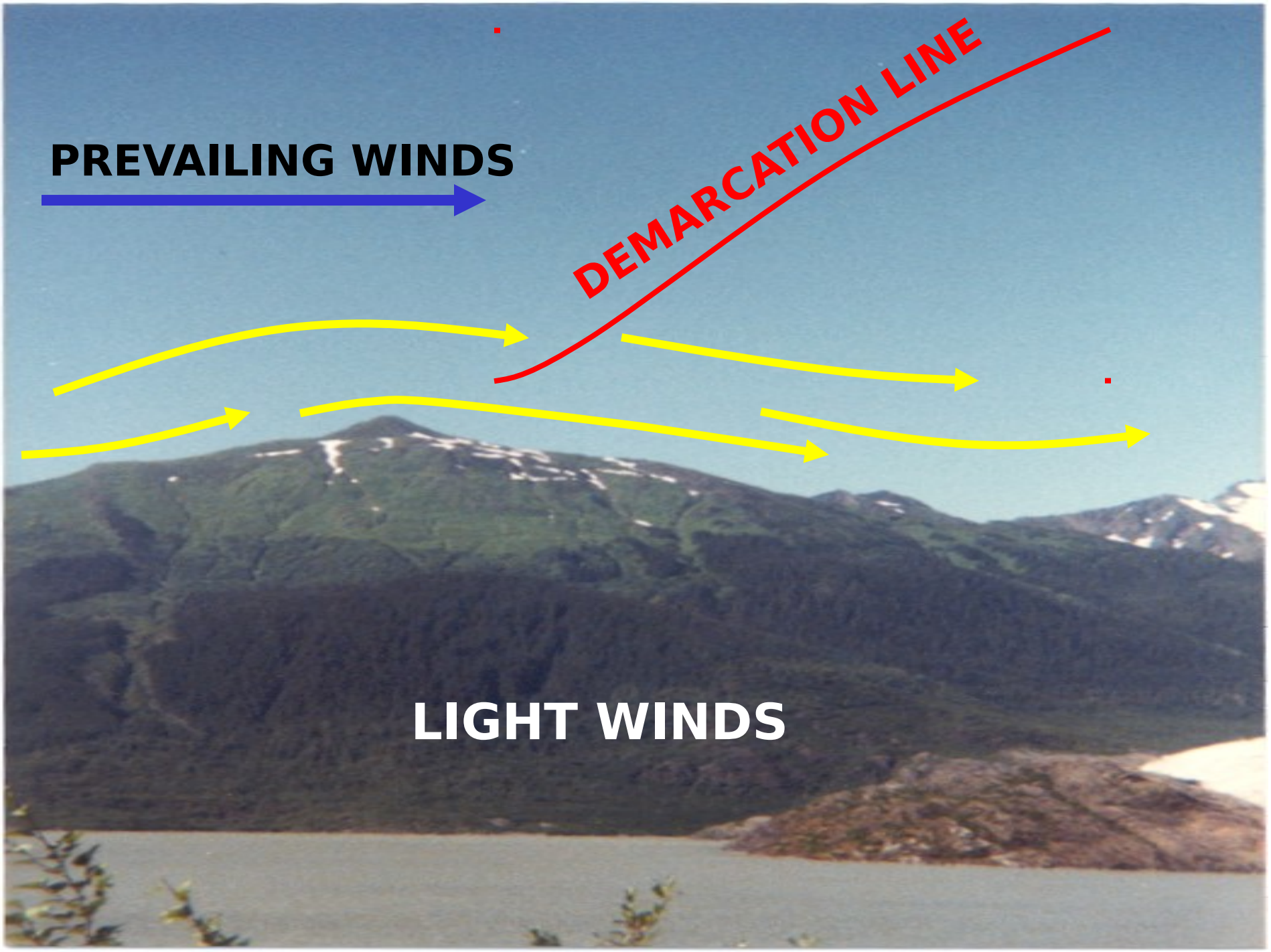
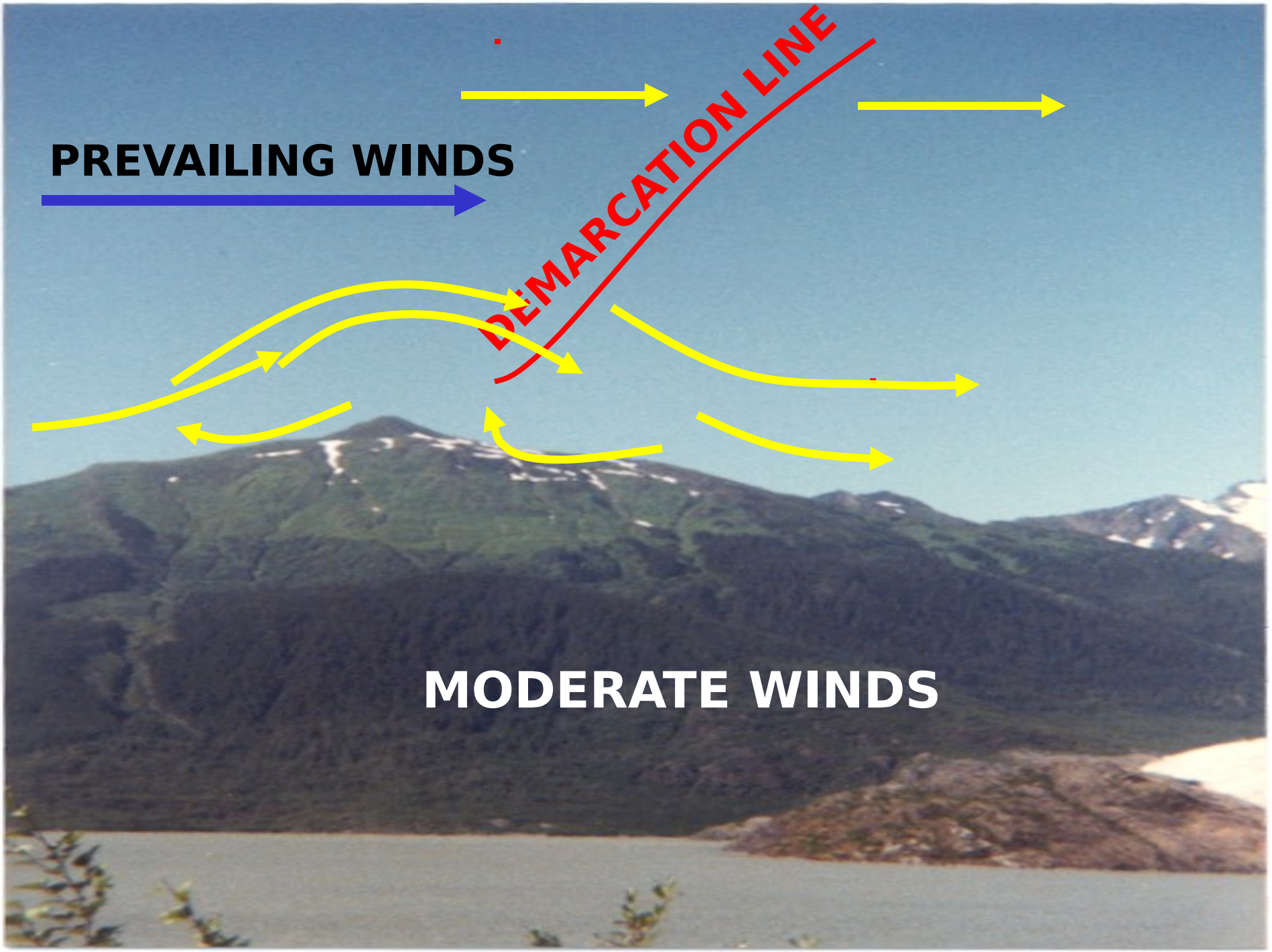
MOUNTAIN OPERATIONS

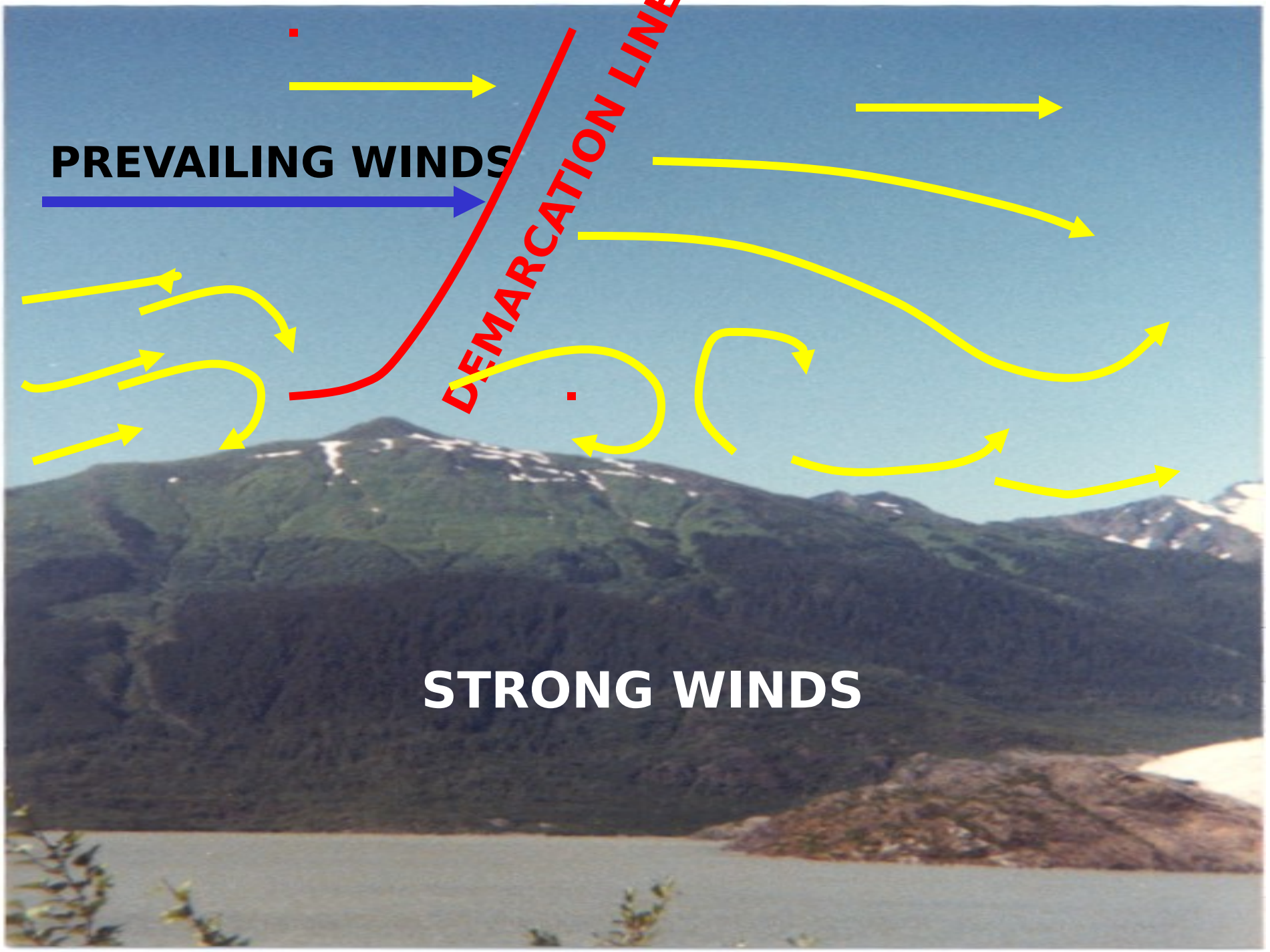
REFERENCES:

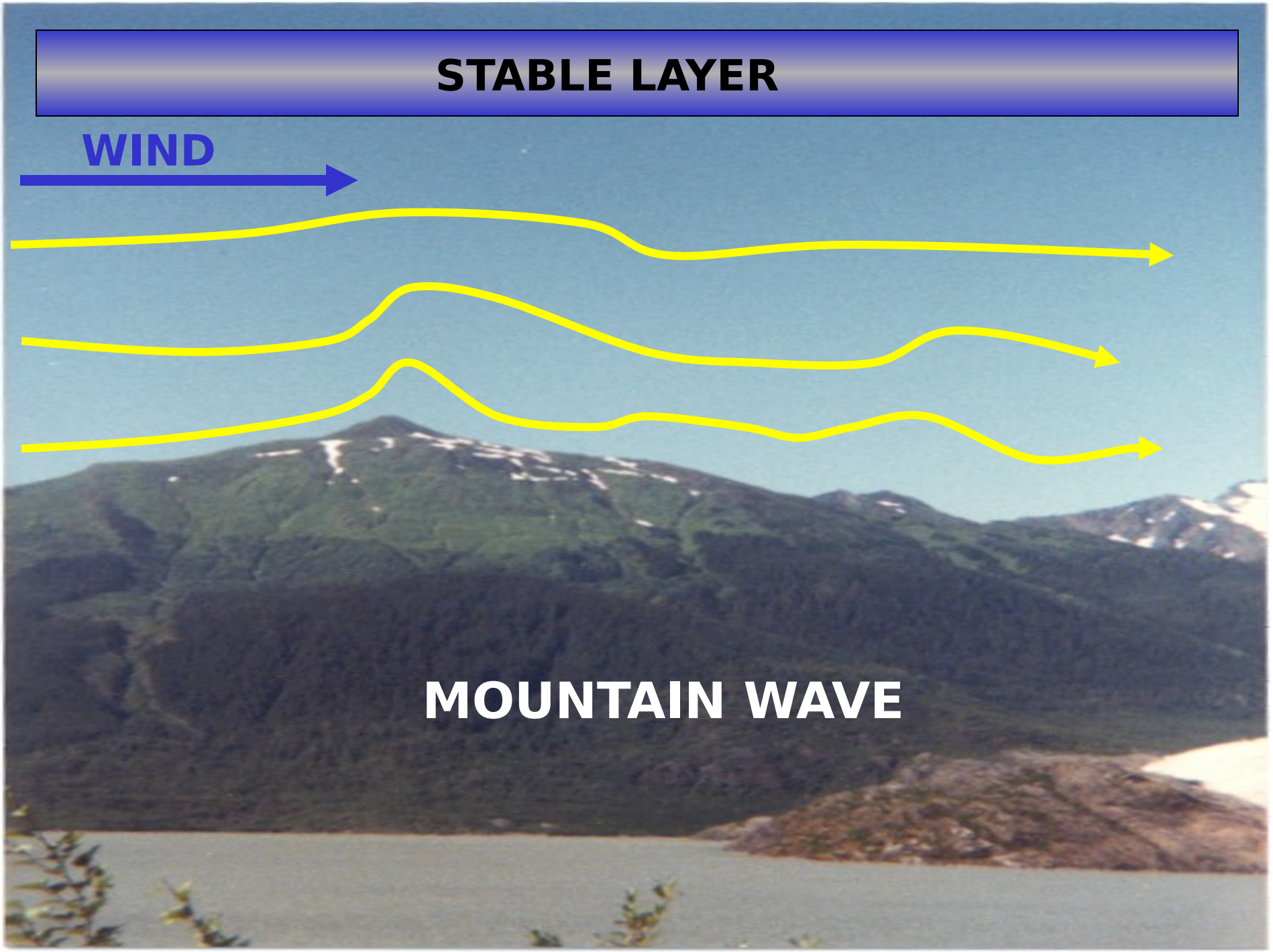
- FM 1-202 ENVIRONMENTAL FLIGHT
- AERONAUTICAL INFORMATION MANUAL (AIM)

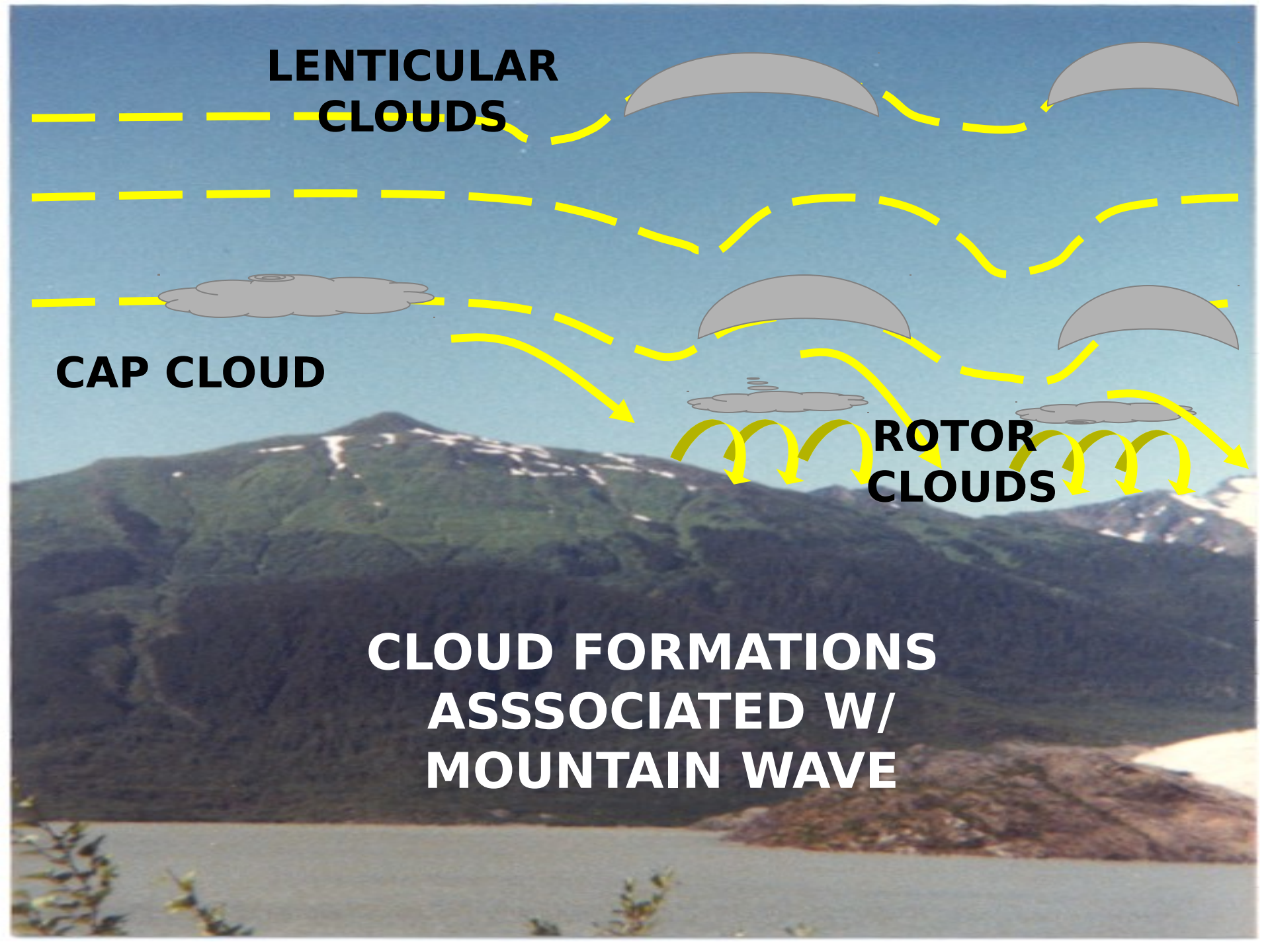

PREVAILING WINDS
DEMARCATION LINE
TURBULENCE
&
DOWNFLOW
LOCAL WIND
(UPFLOW)
SURFACE WINDS

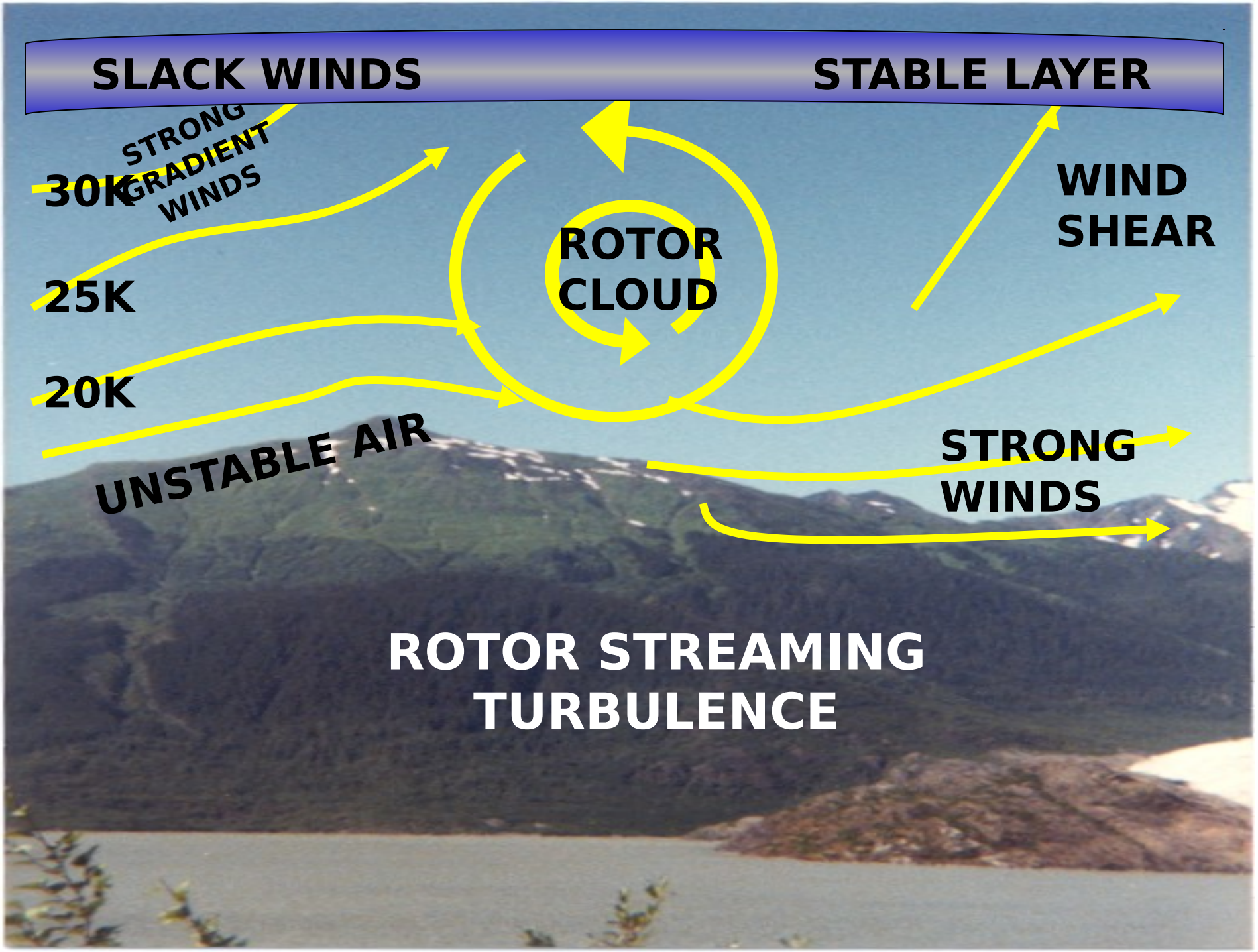

PREVAILING WINDS
DEMARCATION LINE
LIGHT WINDS

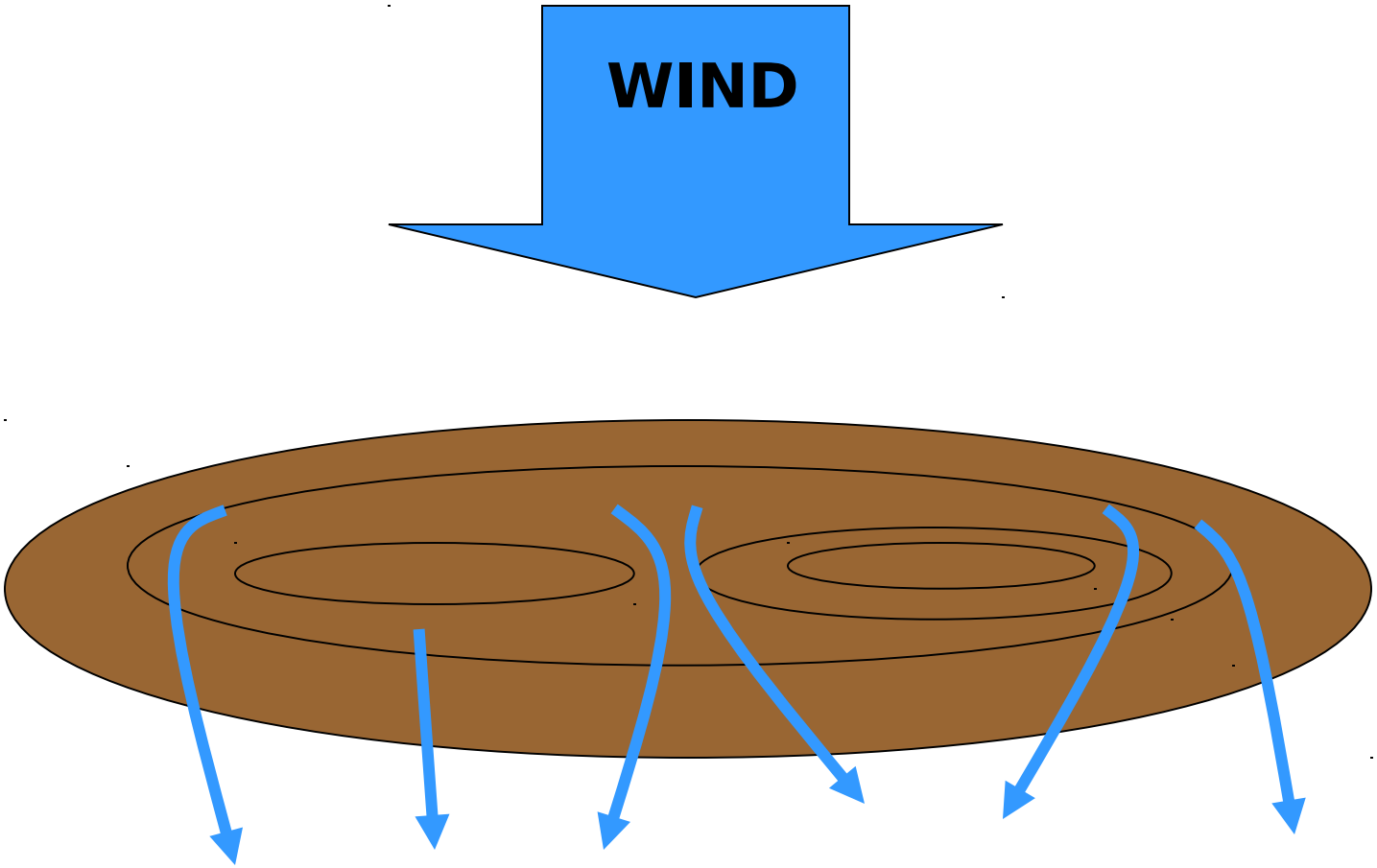

PREVAILING WINDS
DEMARCATION LINE
MODERATE WINDS


PREVAILING WINDS
DEMARCATION LINE
STRONG WINDS

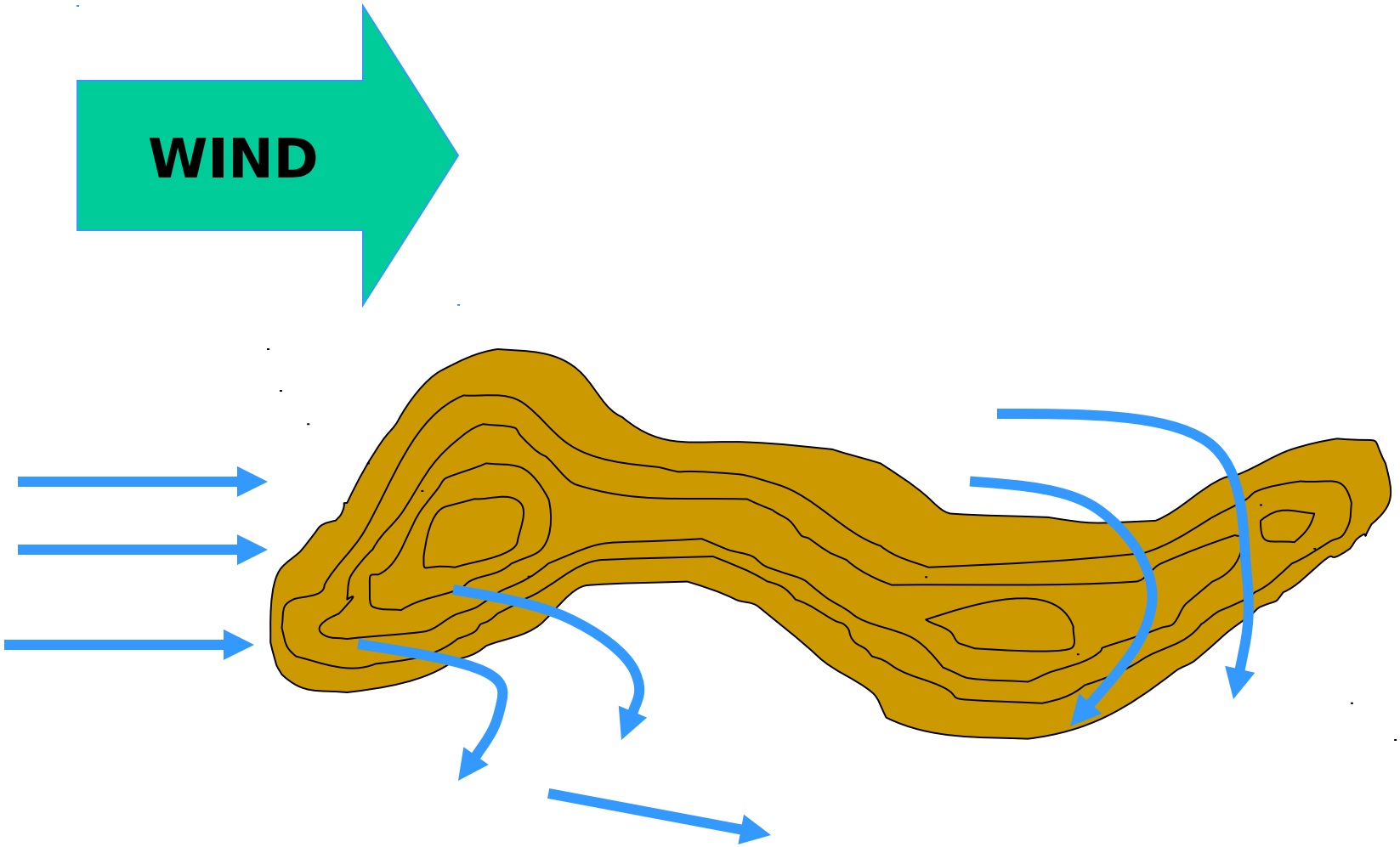

STABLE LAYER
WIND
MOUNTAIN WAVE


LENTICULAR CLOUDS
CAP CLOUD
ROTOR CLOUDS
CLOUD FORMATIONS ASSSOCIATED W/ MOUNTAIN WAVE

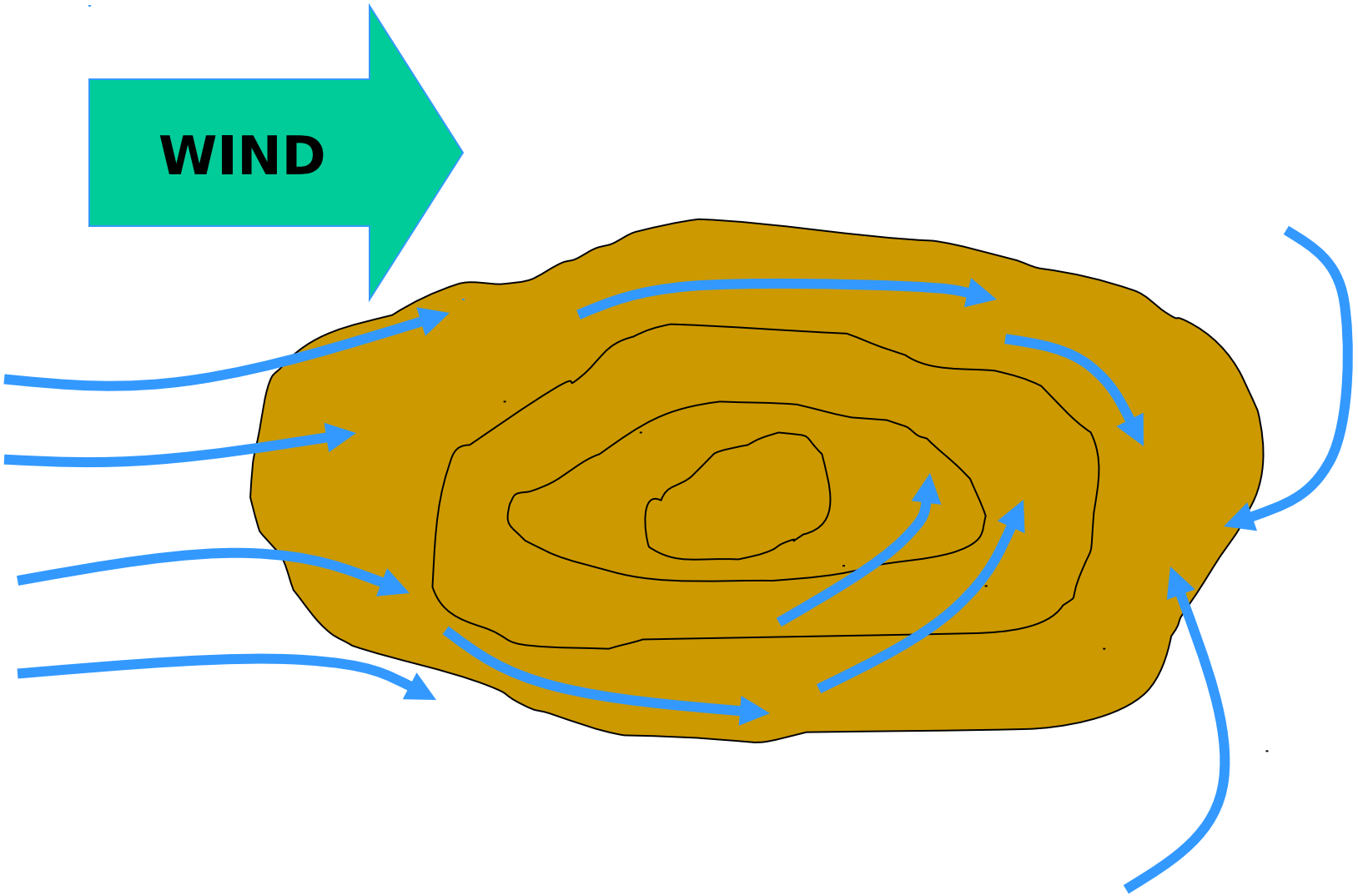

SLACK WINDS
STABLE LAYER
STRONG GRADIENT WINDS
30K
25K
20K
ROTOR CLOUD
WIND SHEAR
UNSTABLE AIR
STRONG WINDS
ROTOR STREAMING TURBULENCE



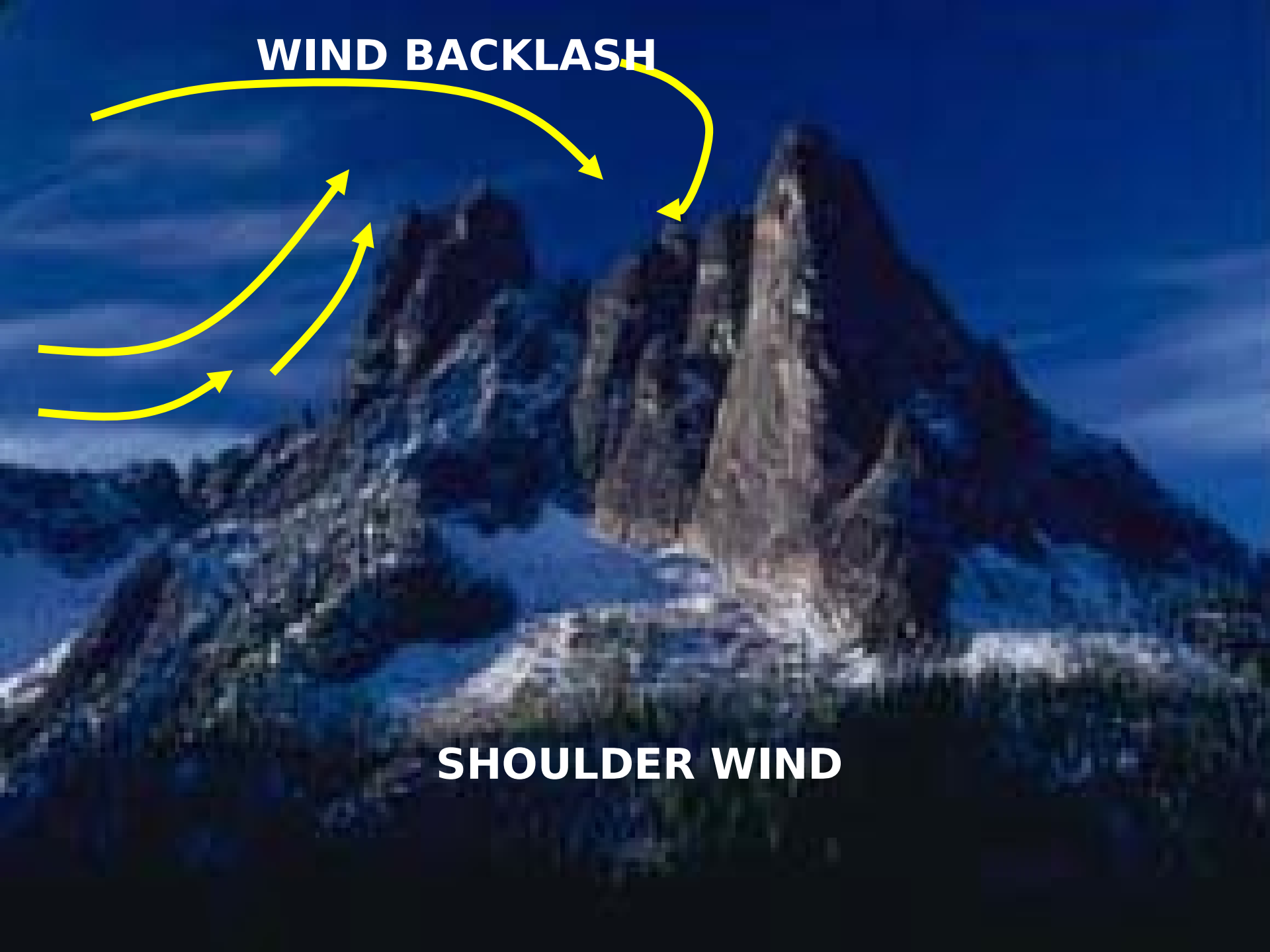
WIND ACROSS A RIDGE

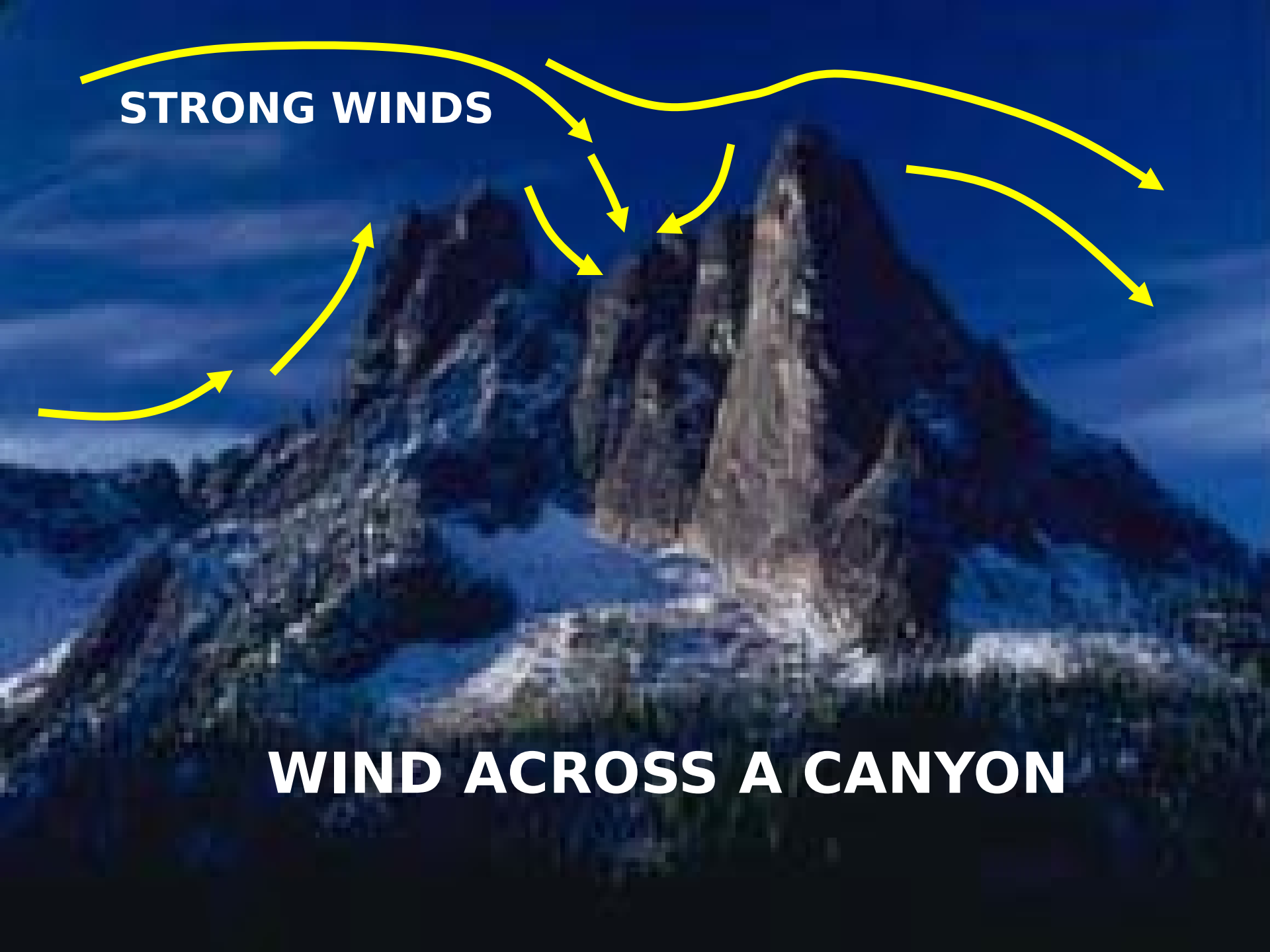


SNAKE RIDGE

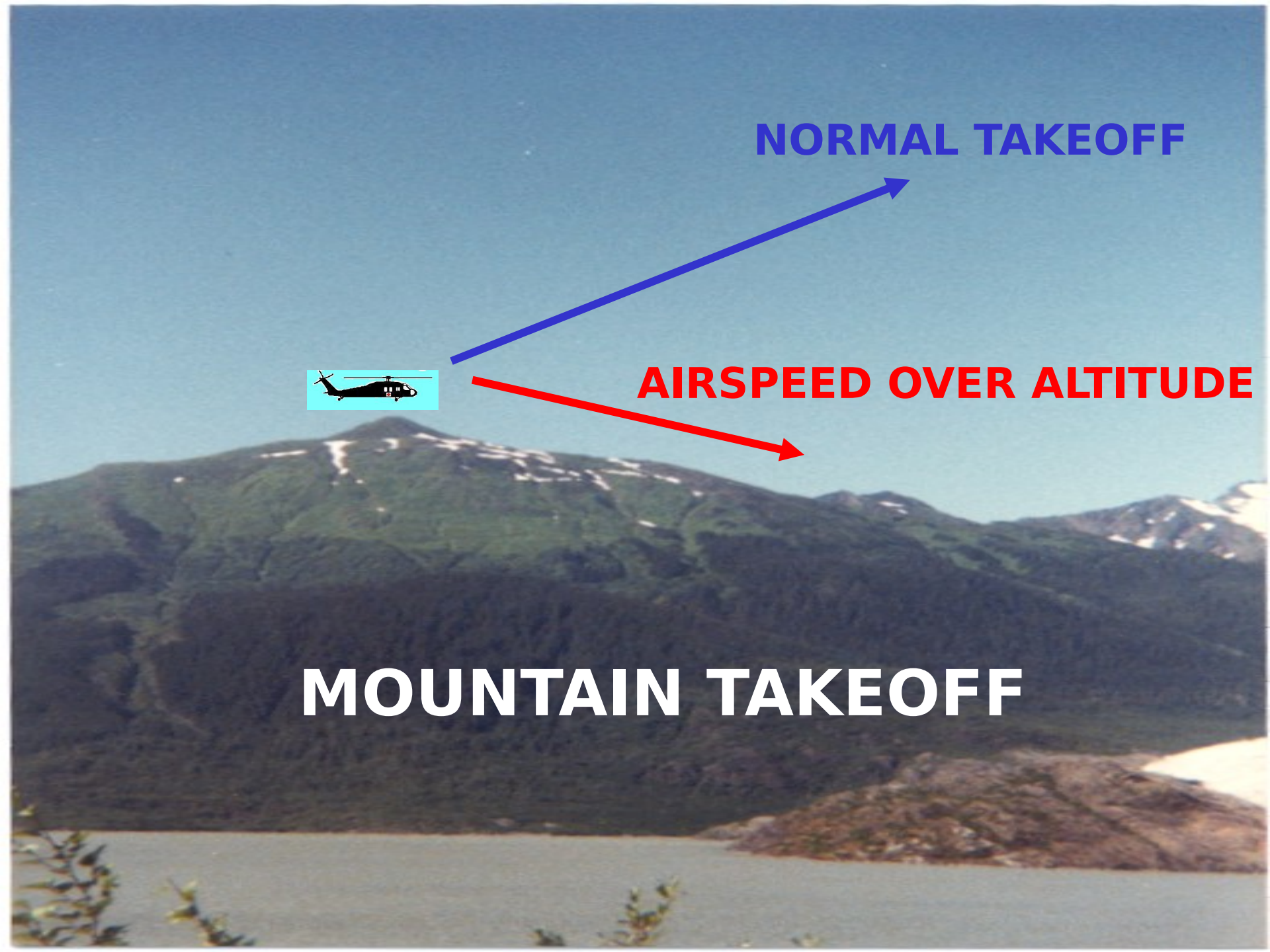


WIND ACROSS A CROWN

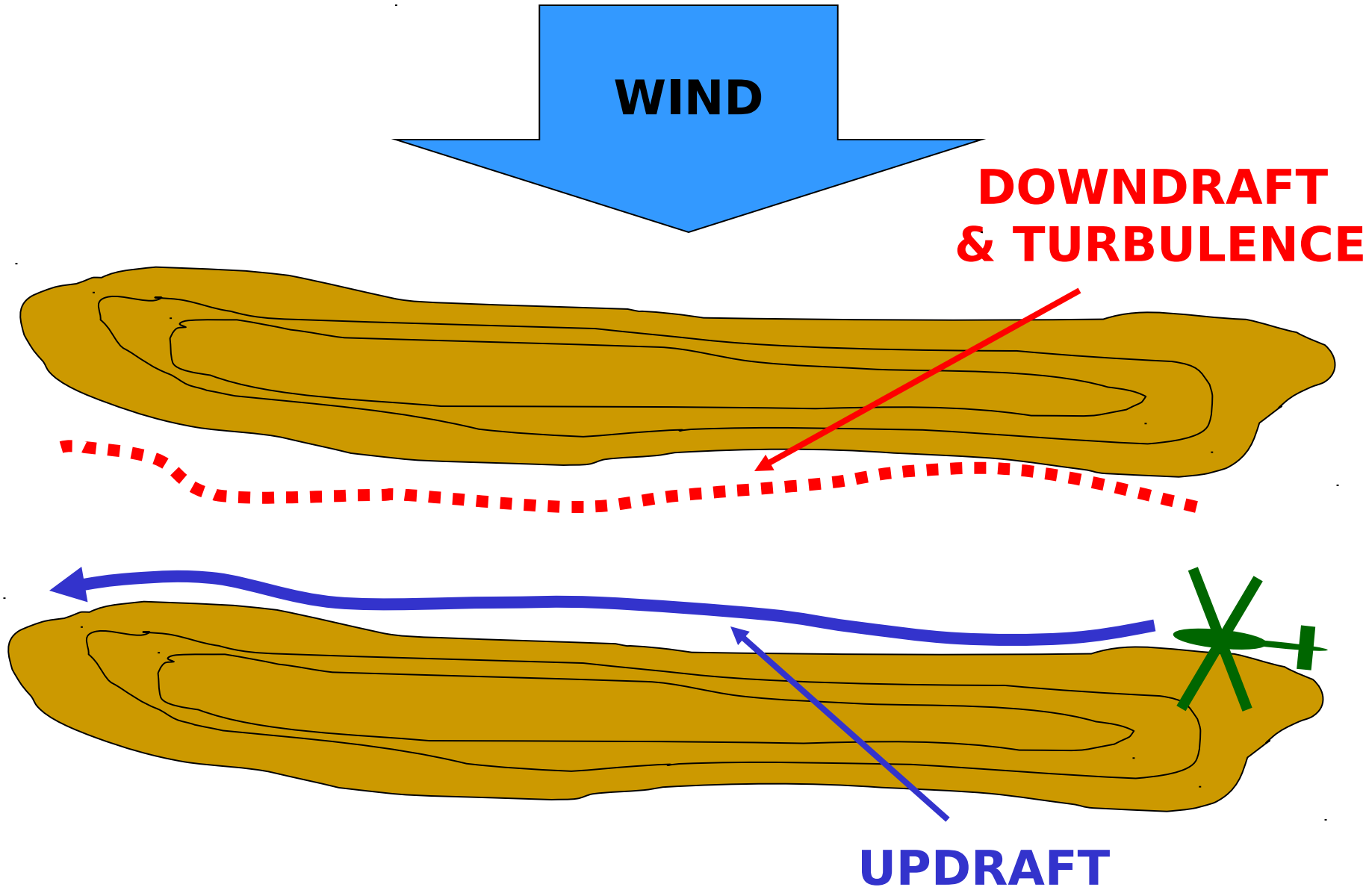

WIND BACKLASH
SHOULDER WIND


STRONG WINDS
WIND ACROSS A CANYON

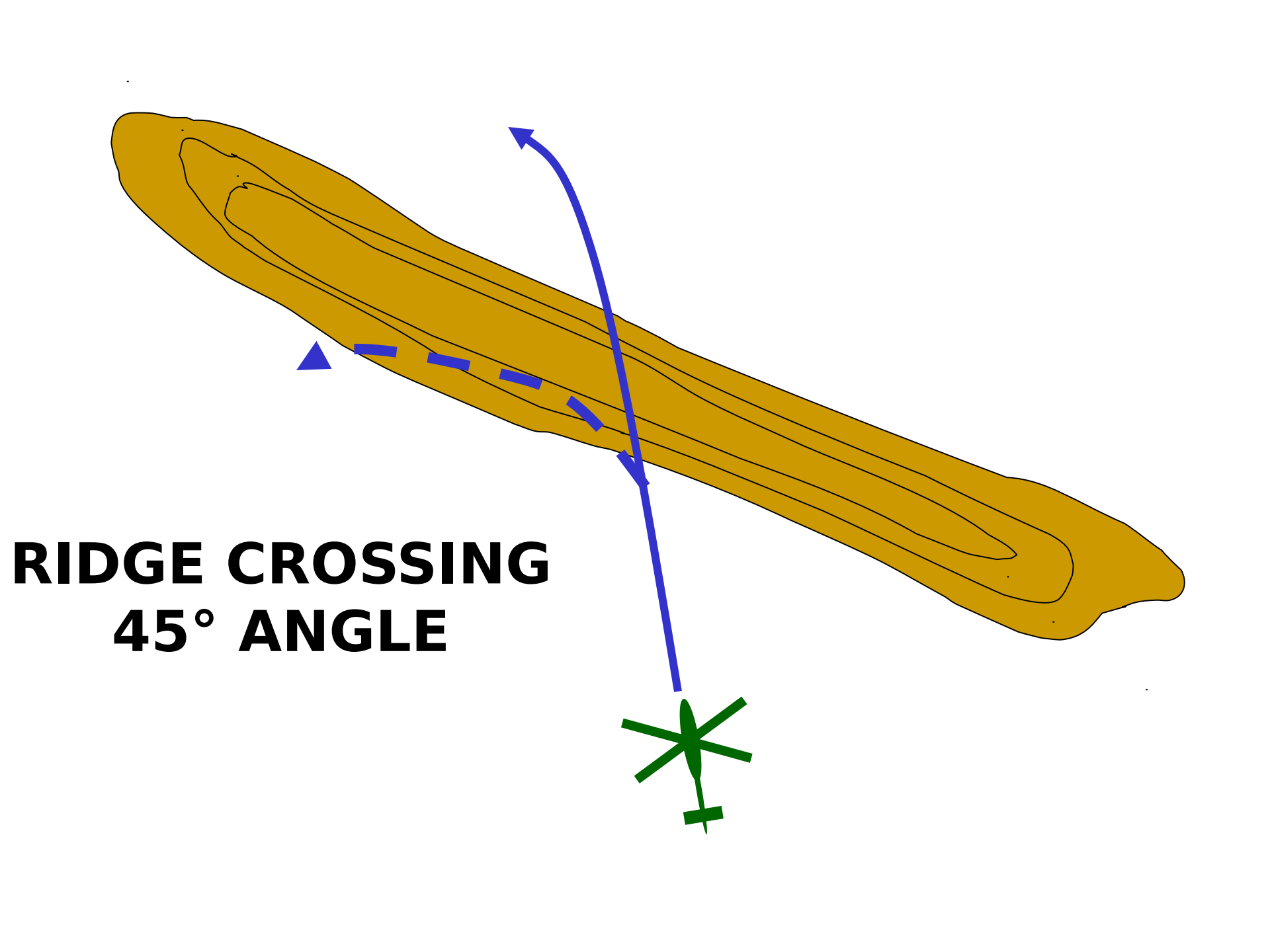
FLYING TECHNIQUES

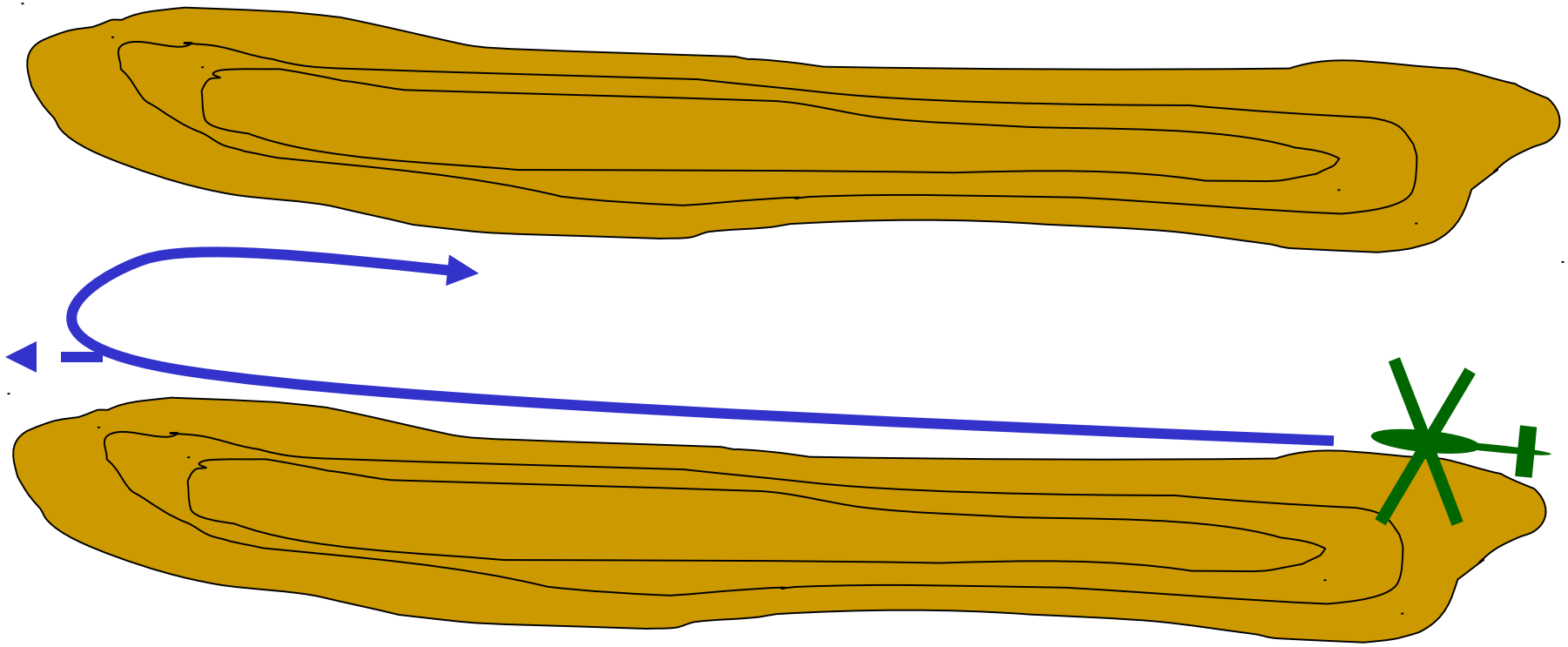

NORMAL TAKEOFF
AIRSPEED OVER ALTITUDE
MOUNTAIN TAKEOFF

ENROUTE



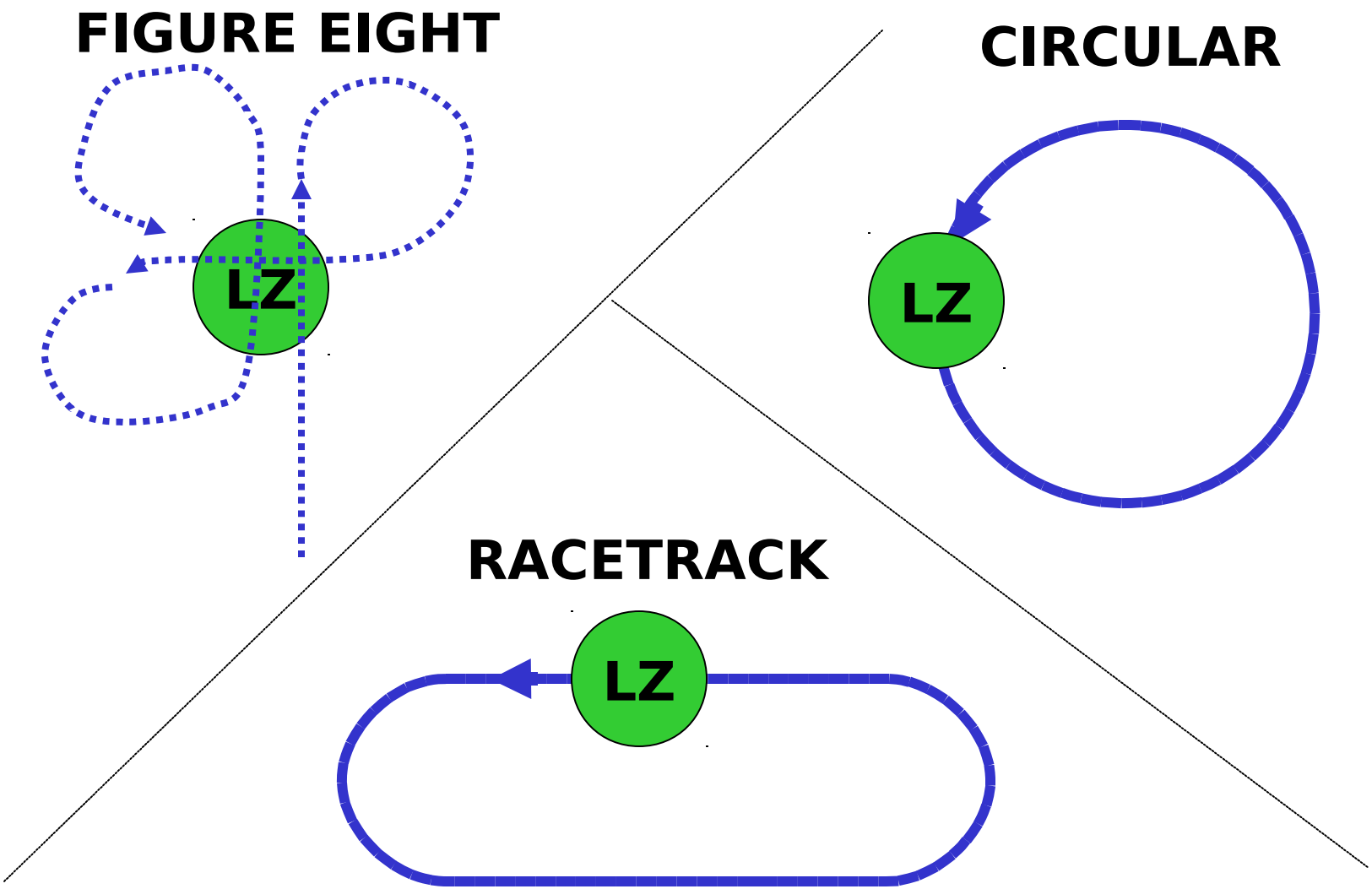
FLIGHT ALONG A VALLEY


RIDGE CROSSING
45° ANGLE

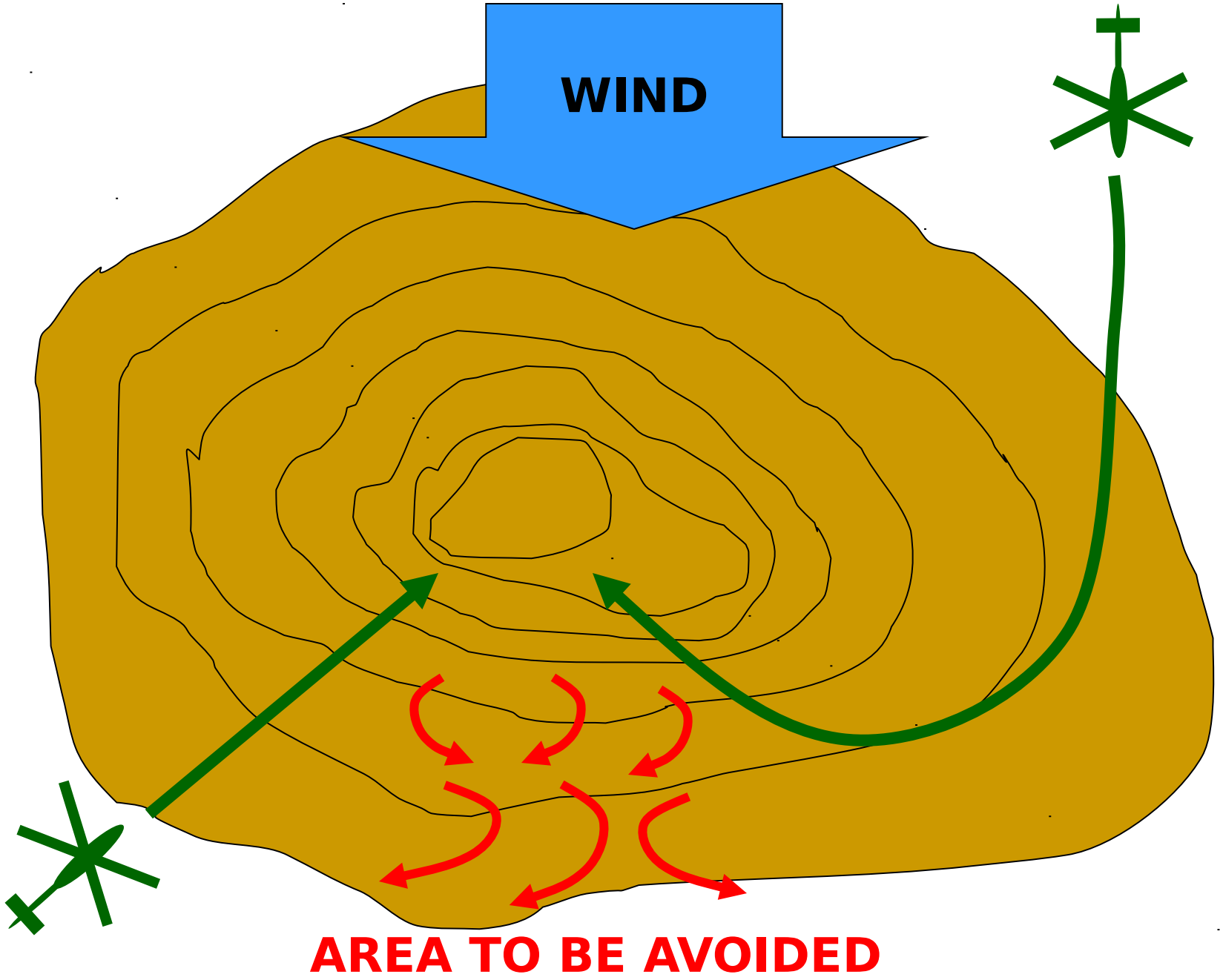


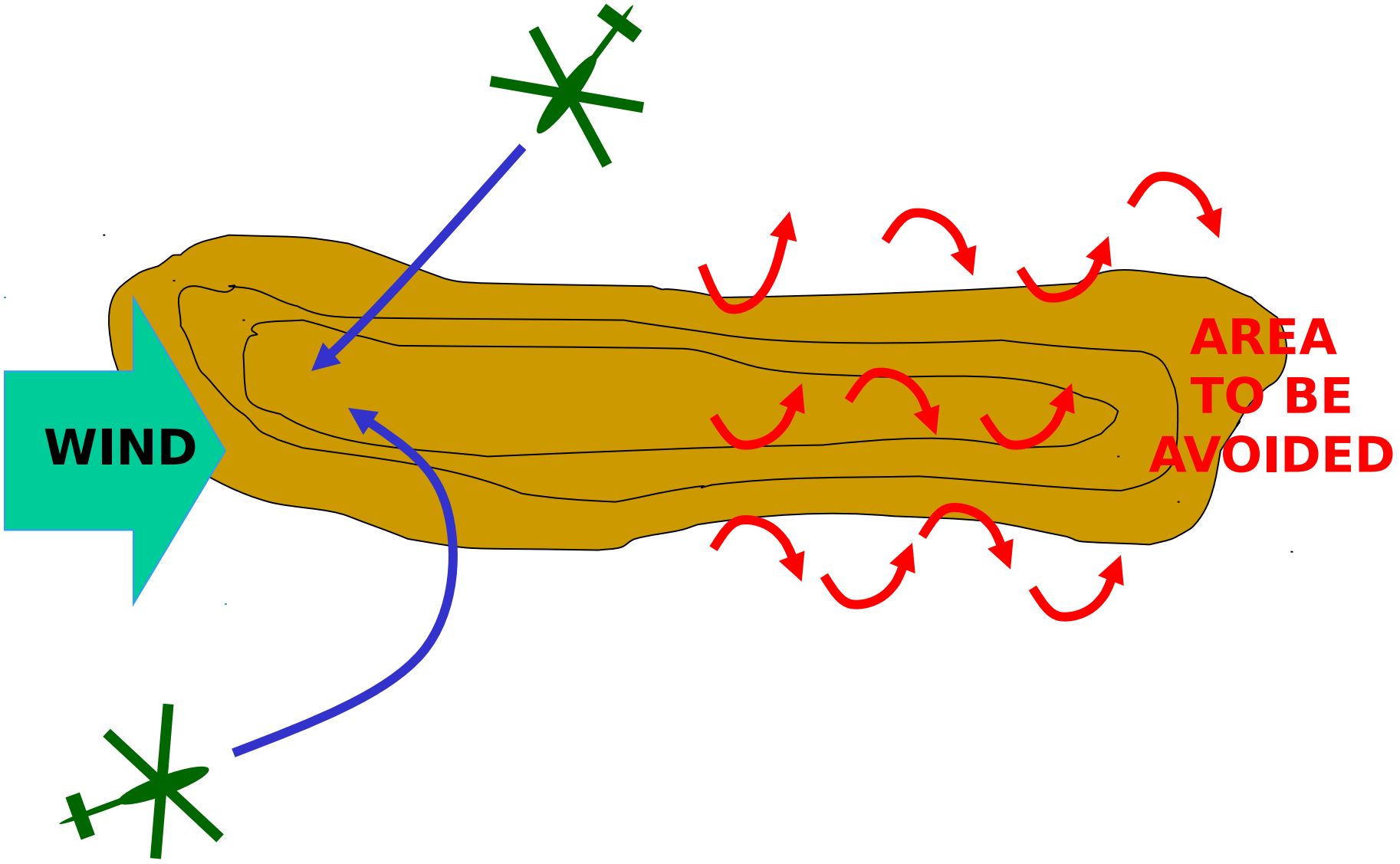
180° TURN OR EARLY CLIMB

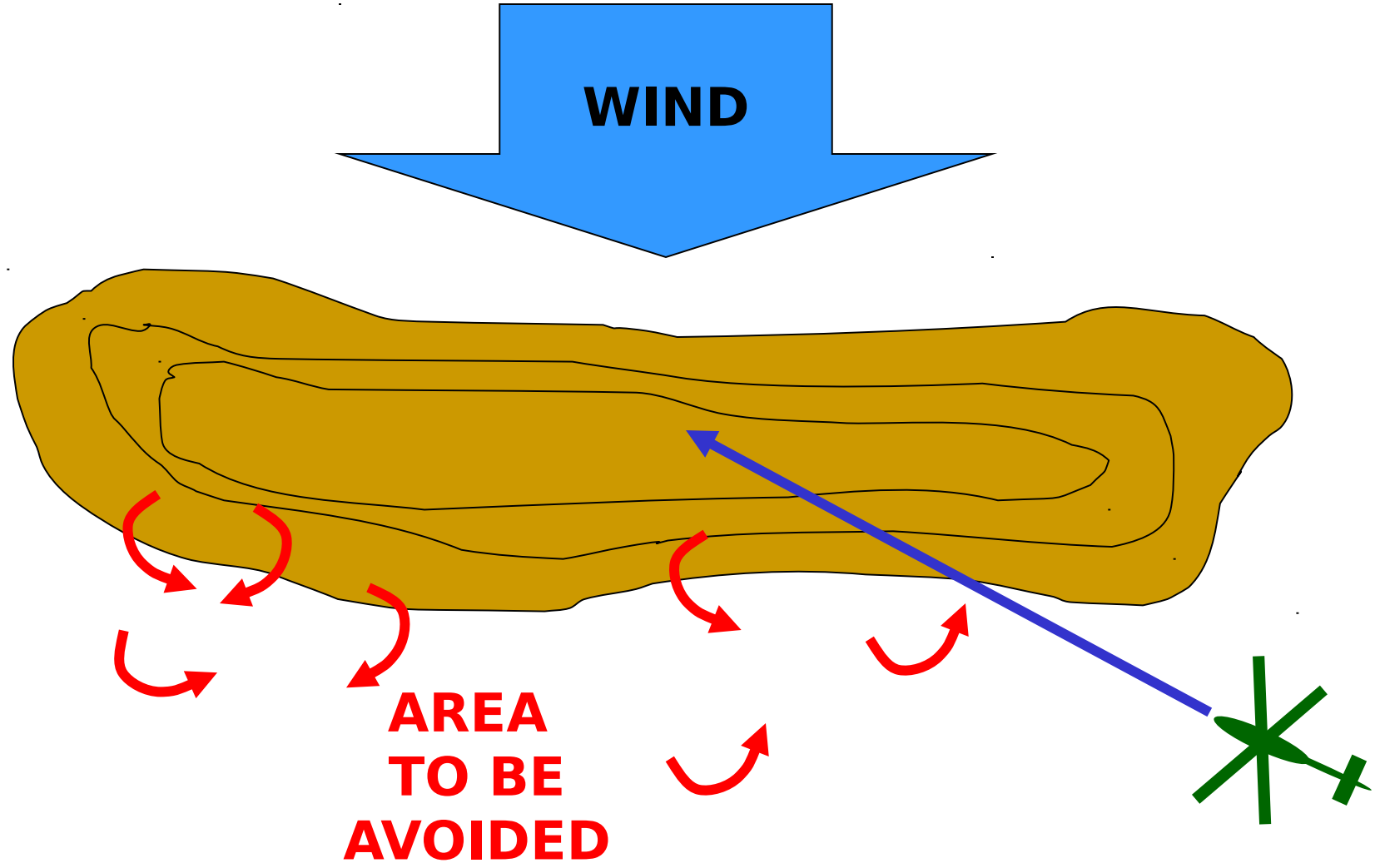

APPROACH
&
LANDING



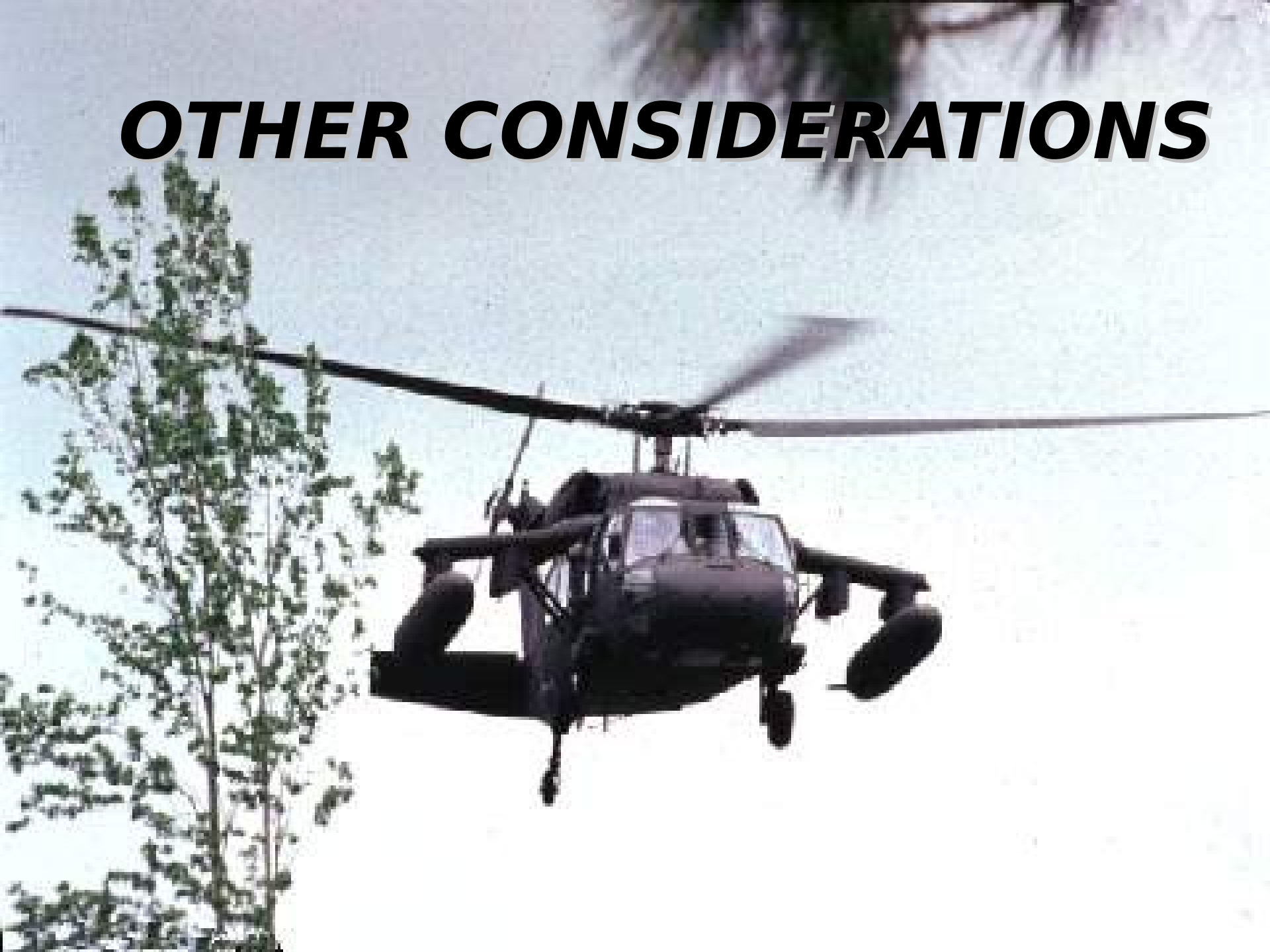
LZ RECONNAISSANCE


WIND
AREA TO BE AVOIDED


WIND
AREA
TO BE
AVOIDED


WIND
AREA
TO BE
AVOIDED

OTHER CONSIDERATIONS



SETTLING WITH POWER

- Vertical / Near Vertical Descent at least 300fpm
- Low Forward Airspeed
- Using some of available Engine Power 20%-100%

HOVER IGE

-Reduced rotor tip vortex

-Reduced velocity of induced airflow

HOVER OGE

-Large blade-tip vortexes

-High velocity of induced airflow